

## REMARKS

This amendment is in response to the Official Action mailed November 1, 2006. In the present paper, claims 1, 8, and 11 are amended and claims 14-19 are canceled. Claims 1-13 are now presented for consideration by the Examiner.

### *Obviousness Rejections*

In the Official Action, the Examiner rejected of claims 1-7 and 11-19 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,964,815 to Wallace et al. (“Wallace”) in view of U.S. Patent No. 4,468,612 to Starr (“Starr”), and rejected claims 8-10 under 35 U.S.C. § 103(a) as unpatentable over Wallace in view of Starr and further in view of U.S. Patent No. 6,988,670 to Keen et al. (“Keen”) and further in view of U.S. Patent Publication No. 2004/0014418 to Farag et al. (“Farag”).

Applicant has carefully considered the Examiner’s Detailed Action and the Response to Applicant’s Arguments, and submits that the claims as amended and now presented are patentable over the cited references.

The Wallace reference, which is the primary reference relied on by the Examiner, teaches an air bag restraint system in which devices 12 on a control interconnection 44 contain electronic switches 54 that regulate communication between a controller 38 and any devices downstream of the device (Wallace, Abstract; col. 5, line 66 – col. 6, line 27; FIG. 1).

Wallace further teaches that each of the switches 54 is in an “off” or “open” position until the associated device 12 is programmed by the controller 38, and until control circuitry 18 in the device 12 subsequently closes the switch (Wallace, col. 6, lines 28-30 & 62-65; col. 7, lines 9-

12). Thus, referring to FIG. 1 of Wallace, an electrical connection 46A from the controller 38 to the device 12B is not completed until the upstream device 12A is programmed and the control circuitry 18A in the upstream device 12A closes the upstream switch 54A.

The Examiner combines Wallace with Starr, which is cited as teaching connectors.

#### Apparatus Claims 1-10

Claim 1 of the present application has been amended to require:

wherein engagement of the electrical contacts of a particular one of the first plurality of electrical couplings with the electrical contacts of a corresponding one of the second plurality of electrical couplings completes an electrical connection from the controller to an electrical coupling of the first plurality of electrical couplings that is farther from the controller than, and adjacent to, the particular one of the first plurality of electrical couplings.

Support for the amendment is found at least at paragraph [0019] and FIGS. 1-3 of the present application. As illustrated, for example, in FIG. 2 of the present application, engagement of the coupling 62 with the coupling 42 completes an electrical connection from the controller 20 to the coupling 44 that is farther from the controller than, and adjacent to, the coupling 42.

Wallace does not teach such a system. Instead, an electrical connection to a downstream device 12B is not created in the Wallace system until after the upstream device 12A is connected and after the device is programmed, and not until the connected and programmed device 12A closes the electronic switch 54A (Wallace, col. 8, lines 39-43). Wallace therefore does not teach that the engagement of one coupling in the series completes an electrical connection from the controller to an adjacent coupling in the series farther from the controller, as required by amended claim 1.

Combining the Starr connectors with the Wallace system does not cure the deficiencies of Wallace. Even with the Starr connectors, engagement of contacts in corresponding connectors does not complete an electrical connection from the controller to an adjacent connector farther from the controller. Instead, the connection to the downstream connector is not completed until after the contacts in the connectors are engaged and after the device is programmed, when the programmed device can close the electronic switch 54.

At least because the combination of Wallace and Starr does not teach the added limitation, Applicant submits that claim 1 is patentable over those references. It is further submitted that dependent claims 2-7, which depend from claim 1 and incorporate its limitations, are patentable at least for the reasons set forth in reference to claim 1.

Independent claim 8 has been amended in a manner similar to that of claim 1. Applicant therefore submits that claim 8, together with claims 9 and 10 which depend therefrom, are patentable for the same reasons set forth above with reference to claim 1.

#### Method Claims 11-13

The initial step of independent method claim 11 has been amended as follows:

identifying with the controller a first one of the devices and  
completing an electrical connection from the controller to a second  
one of the ports when an electrical connection via a first one of the  
ports creates a closed path.

Applicant submits that Wallace does not teach such a system. Instead, in Wallace, the electrical connection to the second one of the ports is not completed until after the electrical connection via the first one of the ports creates a closed path, and not when the connection creates a closed path. Specifically, in Wallace, the connection from the controller to the second device 12B is not

completed until the first device 12A is programmed and the switch 54A in the first device is closed:

After the central controller 38 has finished programming (i.e., establishing an address) the restraint system device 12A, the control circuitry 18A "closes" the electronic switch 54A by controlling the control node 76A (i.e., the gate 74A of the N-channel MOSFET 64). Specifically, prior to the restraint system device 12A being programmed, the control circuitry 18A biases the MOSFET 64 "OFF". When the MOSFET 64 is "OFF", the return port 62A of the restraint system device 12A is not connected to the daisy chain port 72A of the restraint system device 12A. Once the restraint system device 12A is programmed, the control circuitry 18A biases the MOSFET 64A "ON". This, in effect, "closes" the switch 54A which connects the return port 62A to the daisy chain port 72A. The return port 62B of the next restraint system device 12B (device 2) is connected to the central controller 38 through the electronic switch 54A of the first restraint system device 12A (device 1).

(Wallace, col. 8, lines 39-55). Combining the connectors of Starr with the Wallace system does not change the teaching of Wallace to close the switch AFTER the device is connected.


Because Wallace in view of Starr does not teach completing an electrical connection from the controller to a second one of the ports when an electrical connection via a first one of the ports creates a closed path, Applicant submits that claim 11, together with dependent claims 12 and 13, are patentable over those references.

*Conclusion*

Applicant therefore respectfully asserts that claims 1-13 are now in condition for allowance, and earnestly requests that the Examiner issue a Notice of Allowance.

Should the Examiner have any questions regarding the present case, the Examiner should not hesitate in contacting the undersigned at the number provided below.

Respectfully,

By   
Robert T. Canavan  
Reg. No. 37,592  
Telephone: 908-707-1568

Canavan & Monka LLC  
250 State Route 28, Suite 207  
Bridgewater, NJ 08807

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